

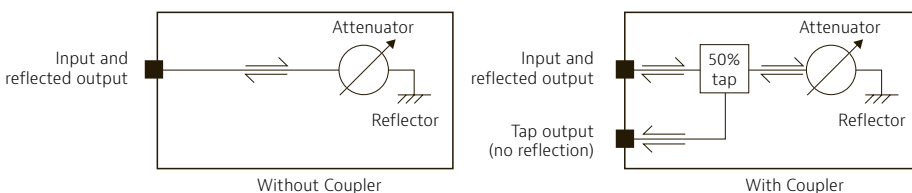
# Map Variable Backreflector

(mVBR-A1)

The Multiple Application Platform (MAP) Variable Backreflector (mVBR-A1) is optimized for the industry-leading Viavi Solutions MAP-200 platform. Based on the previous-generation MAP, the MAP-200 is the first photonic layer lab and manufacturing platform that is LAN Extensions for Instrumentation (LXI)-compliant by conforming to the required physical attributes, Ethernet connectivity, and interchangeable virtual instrument (IVI) drivers. The MAP-200 platform is optimized by density and maximum configurability to meet specific application requirements in the smallest possible footprint. The MAP Variable Backreflector cassette provides precise levels of return loss (RL) to transmitters, enabling system sensitivity measurement or system degradation as a function of back-reflection measurement.

When used with a transmitter/receiver pair and characterization equipment, the MAP backreflector can be used to establish the magnitude of reflections that significantly degrade transmission system performance, and to characterize the problems they cause.

The MAP backreflector uses the Viavi linear attenuator prism and high reflectivity mirror to precisely control the level of RL. The cassette is available in single-mode (SM) or multimode (MM) fibers and with an optional coupler for monitoring.



Optical Configurations for the Variable Backreflector Cassette

### Key Features

- Operation at 850/1310 or 1310/1550 nm
- Single-mode or multimode fiber
- Can be automated when used with MAP-200 LXI-compliant interfaces and IVI drivers

### Applications

- Transmitter/receiver development and testing
- Reflection testing for connectors
- Quality assurance acceptance testing
- Laser development and production

### Safety Information

- The MAP Variable Backreflector, when installed in a MAP chassis, complies to CE, CSA/UL/IEC61010-1, plus LXI Class C requirements.

## Specifications

Parameter	Single-mode fiber (SMF) without Coupler	Single-mode fiber (SMF) with 50/50 Coupler	Multimode fiber (MMF) without Coupler	Multimode fiber (MMF) with 50/50 Coupler
Wavelength range	1260 to 1650 nm	1260 to 1650 nm	750 to 1350 nm	750 to 1350 nm
Maximum backreflection level	> -5.0 dB	> -9.5 dB	> -5.0 dB	> -9.5 dB
Minimum backreflection level (APC/PC)	< -60/ < -45 dB	< -60/ < -45 dB	-30/ < -30 dB	-30/ < -30 dB
Insertion loss (IL)(IN to OUT) <sup>1,2,3</sup>	N/A	< 5.0 dB	N/A	< 6.0 dB
Relative backreflection setting accuracy <sup>1,3,4</sup>	± 0.2	± 0.2	± 0.4	± 0.4
Backreflection setting resolution	0.01	0.01	0.01	0.01
Fiber type	9/125 μm	9/125 μm 62.5/125 μm	50/125 or 62.5/125 μm	50/125 or
Polarization dependent loss (PDL) <sup>1</sup>	< 1.0 dB	< 1.0 dB	N/A	N/A
Maximum optical input power	200 mW			
Calibration period	2 years			
Warm-up time	30 minutes			
Operating temperature	0 to 50°C			
Storage temperature	-30 to 60°C			
Humidity	< 90% at 23°C, < 20% at 50°C (relative non-condensing)			
Dimensions (W x H x D)	4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)			
Weight	1.1 kg (2.43 lb) single backreflector/1.3 kg (2.87 lb) dual backreflector			

1. At 1310 ± 15 and 1550 ± 15 nm for SM units and at 850 ± 15 nm and 1310 ± 15 nm for MM units
2. Including one mated pair of connectors
3. At 23 ± 5°C
4. From maximum backreflection to -40 dB for SM units and from maximum backreflection to -25 dB for MM units

## Ordering Information

For more information on this or other products and their availability, please contact your local Viavi account manager or Viavi directly at 1-844-GO-VIAVI (1-844-468-4284) or to reach the Viavi office nearest you, visit [viavisolutions.com/contacts](http://viavisolutions.com/contacts).

Description	Part Number
<b>Base Options (Required)</b>	
Single Backreflector, no built-in option	MVBR-A1S0
Single Backreflector with built-in 50/50 splitter	MVBR-A1S1
Dual Backreflector, no built-in option	MVBR-A1D0
Dual Backreflector with built-in 50/50 splitter	MVBR-A1D1
<b>Fiber Type Options (Required if splitter option selected, select one)</b>	
9/125 fiber type	M100
50/125 fiber type	M101
62.5/125 fiber type	M102
<b>Connector Options (Required)</b>	
FC/PC connector type	MFP
FC/APC connector type (for M100 fiber type option only)	MFA
SC/PC connector type	MSC
SC/APC connector type (for M100 fiber type option only)	MSU



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